



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,233	11/25/2003	Tsutomu Kajino	13683	6687

7590 06/24/2004

ORUM & ROTH
53 W. JACKSON BLVD
CHICAGO, IL 60604

EXAMINER

NGUYEN, XUAN LAN T

ART UNIT	PAPER NUMBER
----------	--------------

3683

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,233

Applicant(s)

KAJINO, TSUTOMU

Examiner

Lan Nguyen

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/27/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: "52". Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- The claimed feature, "is comprises one leaf valve, and the other second leaf valves comprises a plurality of leaf valves" in lines 4 and 5 of claim 3 is

Art Unit: 3683

confusing. It is believed that Applicant intends to claim -- is one of a leaf valve and a plurality of leaf valves--. Claim 3 has been examined as -- is one of a leaf valve and a plurality of leaf valves--.

- Claim 7 is redundant because it is claiming the same feature as claim 5 or the same feature as claim 6.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by figure 3C of the admitted prior art in the specification.

Re: claim 1, Figure 3C shows a valve structure of a hydraulic shock absorber for a vehicle, as in the present invention, comprising: a first leaf valve 2 (directly contacting element 1) provided in an opening portion 1A of a flow passage arranged in a partition wall member 1 sectioning an oil passage; a small-diameter leaf valve 3 provided in an opposite side of the first leaf valve 2 to the partition wall member; a plurality of second leaf valves 4's and 2 (immediately between elements 3 and 7) provided in an opposite side of the small-diameter leaf valve 3 to the first leaf valve 2; (note that the claim language does not specifically recite that all second leaf valves are provided in an opposite side of the small-diameter leaf valve to the first leaf valve); an annular gap

Art Unit: 3683

provided in an outer peripheral side of the small-diameter leaf valve, between the first leaf valve 2 and the second leaf valve 4; the respective leaf valves being fixed in inner peripheral sides thereof so as to be laminated on the partition wall member, as shown, wherein an inner leaf valve 7 is disposed between the plurality of second leaf valves 4's and 2, and an annular outer leaf valve 8 having a larger thickness than that of the inner leaf valve 7 is disposed on an outer peripheral side of the inner leaf valve 7.

Re: claim 2, Figure 3C further shows an outer diameter of the small-diameter leaf valve 7 is set to be no greater than a distance from a center of the partition wall member 1 to the flow passage 1A provided in the partition wall member 1.

Re: claim 3, Figure 3C further shows the second leaf valve 2 provided between the small-diameter leaf valve 3 and the inner leaf valve 7 wherein the plurality of second leaf valves is a one leaf valve.

Re: claims 5 and 7, Figure 3C shows that the second leaf valve comprises a plurality of leaf valves 4's having smaller diameters step by step such that the second leaf valve is formed in a pyramid shape as the second leaf valve departs from the small-diameter leaf valve.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Figure 3C of the admitted prior art in the specification.

The valve structure of figure 3C, as rejected in claim 1, lacks the claimed feature of a plurality of first leaf valves 2 and plurality of second leaf valves 4 having the same diameter. It is old and well known to have a multiple of the same element in order to increase a desired feature in said element. In this case, having a plurality of first leaf valves or having a plurality of second leaf valves with the same diameter would increase the stiffness of the valve assemblies which in turn would dampen the larger amplitudes in the vibration. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the valve structure of figure 3C to have a plurality of first leaf valves or to have a plurality of second leaf valves with the same diameter to increase the stiffness of the valve assemblies which in turn would dampen the larger amplitudes in the vibration to provide a more comfortable ride.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miura is cited for an outer annular disc valve 27 having a thickness greater than that of an inner valve 24. Grundei et al. are cited for an outer annular disc valve 15 having a thickness greater than that of an inner valve 17. Miyazawa is cited for an outer annular disc valve 36 having a thickness greater than that of an inner valve 35.


Art Unit: 3683

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is 703-308-8347.

The examiner can normally be reached on M-F, 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Patent Examiner
A. U. 3683
June 17th, 2004